

## CLAIMS

1. An image description system comprising:  
a feature extracting unit extracting layout  
features from respective of frames of an image  
5 sequence; and  
a representative feature calculating unit  
calculating a representative layout feature  
representative of said image sequence from a group  
of said layout features extracted by said feature  
10 extracting unit.
2. An image description system comprising:  
a feature extracting unit extracting layout  
features from respective of frames of an image  
15 sequence;  
a representative feature calculating unit  
calculating a representative layout feature  
representative of said image sequence from a group  
of said layout features extracted by said feature  
20 extracting unit; and  
a representative layout feature storage unit  
storing said representative layout feature  
calculated by said representative feature  
calculating unit.  
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3. An image description system comprising:  
a feature extracting unit extracting layout  
features from respective of frames of an image

sequence;

a representative feature calculating unit  
calculating a representative layout feature  
representative of said image sequence from a group  
5 of said layout features extracted by said feature  
extracting unit;

a representative layout feature storage unit  
storing said representative layout feature  
calculated by said representative feature  
10 calculating unit; and

a layout feature group storage unit storing  
said group of layout features calculated by said  
feature extracting unit.

15 4. The image description system according to any  
one of claims 1 to 3,

wherein said representative feature  
calculating unit calculates average values of  
respective elements of a layout feature extracted  
20 by said feature extracting unit as a representative  
feature.

5. The image description system according to any  
one of claims 1 to 3,

25 wherein said representative feature  
calculating unit rearranges values of respective  
elements of a layout feature extracted by said  
feature extracting unit in any of ascending order

and descending order, and calculates a median as a representative feature.

6. The image description system according to any  
5 one of claims 1 to 5,  
wherein said layout feature is a color layout information.

7. The image description system according to any  
10 one of claims 1 to 5,  
wherein said layout feature is an edge histogram information.

8. The image description system according to any  
15 one of claims 1 to 7,  
wherein said representative feature is described based on a description scheme in which said representative feature is selectable from a plurality of features including at least  
20 ColorLayout and EdgeHistogram, and a representative feature calculating method is selectable from a plurality of methods including at least Average and Median.

25 9. An image description software product executable on a computer realizing:  
a feature extracting function for extracting layout features from respective of frames of an

image sequence; and

a representative feature calculating function for calculating a layout feature representative of said image sequence from a group  
5 of said layout features extracted by said feature extracting function.

10. An image description method comprising:

a feature extracting step for extracting  
10 layout features from respective of frames of an image sequence; and

a representative feature calculating step for calculating a layout feature representative of said image sequence from a group of said layout  
15 features extracted in said feature extracting step.

11. An image identification system comprising:

a representative layout feature storage unit storing a layout feature representative of an image  
20 sequence as a representative layout feature; and

an image sequence selecting unit selecting an image sequence which resembles a query image sequence by comparing said representative layout feature of said query image sequence stored in said  
25 representative layout feature storage unit with said representative layout feature of a registered image sequence stored in said representative layout feature storage unit.

12. An image identification system comprising:  
a representative layout feature storage unit  
storing a layout feature representative of an image  
5 sequence as a representative layout feature;  
a feature extracting unit extracting layout  
features from respective of frames of a query image  
sequence;  
a representative feature calculating unit  
10 calculating a representative layout feature  
representative of said query image sequence from a  
group of said layout features extracted by said  
feature extracting unit; and  
an image sequence selecting unit selecting a  
15 sequence which resembles said query image sequence  
by comparing said representative layout feature  
calculated by said representative feature  
calculating unit with said representative layout  
feature stored in said representative layout  
20 feature storage unit.

13. An image identification system comprising:  
a representative layout feature storage unit  
storing a layout feature representative of an image  
25 sequence as a representative layout feature;  
a layout feature group storage unit storing  
layout features associated with respective of  
frames of said image sequence;

a feature extracting unit extracting layout features from respective of frames of a query image sequence;

a representative feature calculating unit  
5 calculating a representative layout feature representative of said query image sequence from a group of said layout features extracted by said feature extracting unit;

an image sequence selecting unit selecting an  
10 image sequence which resembles said query image sequence by comparing said representative layout feature calculated by said representative feature calculating unit with said representative layout feature stored in said representative layout  
15 feature storage unit; and

an identification unit matching said group of layout features extracted by said layout feature extracting unit against said layout features stored in said layout feature group as to said image  
20 sequence selected by said image sequence selecting unit.

14. The image identification system according to claim 12 or 13,

25 wherein said representative feature calculating unit calculates average values of respective elements of a layout feature extracted by said feature extracting unit as a representative

feature.

15. The image identification system according to claim 12 or 13,

5 wherein said representative feature calculating unit rearranges values of respective elements of a layout feature extracted by said feature extracting unit in any of ascending order or descending order, and calculates a median as a  
10 representative feature.

16. The image identification system according to any one of claims 11 to 15,

wherein said layout feature is a color layout  
15 information.

17. The image identification system according to any one of claims 11 to 16,

wherein said layout feature is an edge  
20 histogram information.

18. The image identification system according to any one of claims 11 to 17,

wherein said representative feature is  
25 described based on a description scheme in which said representative feature is selectable from a plurality of features including at least ColorLayout and EdgeHistogram, and a representative

feature calculating method is selectable from a plurality of methods including at least Average and Median.

5 19. An image identification software product executable on a computer realizing:

a storage function for storing a layout feature representative of an image sequence as a representative layout feature in a storage function  
10 of said computer; and

a selection function for selecting an image sequence which resembles a query image sequence by comparing said representative layout feature of said query image sequence stored by said storage  
15 function with said representative layout feature of a registered image sequence stored by said storage function.

20. An image identification method comprising:  
20 a storing step for storing a layout feature representative of an image sequence as a representative layout feature; and

an image sequence selecting step for selecting an image sequence which resembles a query  
25 image sequence by comparing said representative layout feature of said query image sequence stored in said storing step with said representative layout feature of a registered image sequence stored in



said storing step.

21. A description scheme for describing a feature of an image sequence,

5            wherein a representative feature is selectable from a plurality of features including at least ColorLayout and EdgeHistogram, and a representative feature calculating method is selectable from a plurality of methods including at  
10 least Average and Median.